

A. AMENDMENTS TO CLAIMS

Please amend the claims as indicated hereinafter.

1. (CURRENTLY AMENDED) A method for storing data in a nonvolatile memory, comprising the computer-implemented steps of:
a software application determining a desired location in the nonvolatile memory for storing a data block;
the software application inserting an address value in the data block, wherein the address value identifies the desired location;
prior to performing an operation that stores the data block to the nonvolatile memory, a module other than the software application verifying that the address value contained within the data block correctly identifies the location in the nonvolatile memory into which the operation is going to store the data block; and
performing the operation to store the data block to the nonvolatile memory only if the address value contained within the data block correctly identifies the desired location in the nonvolatile memory into which the operation is going to store the data block.
2. (ORIGINAL) The method as recited in Claim 1, further comprising the computer-implemented step of after storing the data block to the nonvolatile memory, reading the data block from a location in the nonvolatile memory; and determining, based upon the address value contained within the data block, whether the data block was read from the desired location in the nonvolatile memory.
3. (ORIGINAL) The method as recited in Claim 2, wherein the step of determining, based upon the address value contained within the data block, whether the data block was read from the desired location in the nonvolatile memory includes comparing at least a portion of the address value contained within the data block with data that indicates the location in the nonvolatile memory from which the data block was read.
4. (ORIGINAL) The method as recited in Claim 1, further comprising the computer-implemented step of maintaining a mapping that identifies a specific location in the nonvolatile memory into which the data block is to be stored.

5. (CURRENTLY AMENDED) The method as recited in Claim 1, wherein:
the step of the software application determining a location in the nonvolatile memory includes the software application determining a plurality of locations in the nonvolatile memory for storing the data block;
the step of the software application inserting an address value in the data block includes the software application inserting a plurality of address values in the data block, wherein the plurality of address values identify multiple locations in the nonvolatile memory into which the data block is to be stored; and
the step of storing the data block to the nonvolatile memory includes storing the data block into each of the multiple locations in the nonvolatile memory only after the module other than the software application verifying that the plurality of address values includes an address value that correctly identifies the location in the nonvolatile memory into which the data block is to be stored.
6. (CURRENTLY AMENDED) The method as recited in Claim 1, wherein:
the step of the module other than the software application verifying that the address value contained within the data block correctly identifies the location in the nonvolatile memory into which the operation is going to store the data block is performed by a storage device, and
the step of performing the operation to store the data block to the nonvolatile memory only if the address value contained within the data block correctly identifies the desired location in the nonvolatile memory into which the operation is going to store the data block is performed by the storage device.
7. (CURRENTLY AMENDED) A computer-readable medium for storing data in a nonvolatile memory, the computer-readable medium carrying instructions which, when processed by one or more processors, cause the performance of the steps of:
a software application determining a desired location in the nonvolatile memory for storing a data block;
the software application inserting an address value in the data block, wherein the address value identifies the desired location;

prior to performing an operation that stores the data block to the nonvolatile memory, a module other than the software application verifying that the address value contained within the data block correctly identifies the location in the nonvolatile memory into which the operation is going to store the data block; and performing the operation to store the data block to the nonvolatile memory only if the address value contained within the data block correctly identifies the desired location in the nonvolatile memory into which the operation is going to store the data block.

8. (ORIGINAL) The computer-readable medium as recited in Claim 7, further comprising one or more additional instructions which, when executed by the one or more processors, cause the performance of the additional step of after storing the data block to the nonvolatile memory,
reading the data block from a location in the nonvolatile memory; and
determining, based upon the address value contained within the data block, whether the data block was read from the desired location in the nonvolatile memory.
9. (ORIGINAL) The computer-readable medium as recited in Claim 8, wherein the step of determining, based upon the address value contained within the data block, whether the data block was read from the desired location in the nonvolatile memory includes comparing at least a portion of the address value contained within the data block with data that indicates the location in the nonvolatile memory from which the data block was read.
10. (ORIGINAL) The computer-readable medium as recited in Claim 7, further comprising one or more additional instructions which, when executed by the one or more processors, cause the performance of the additional step of maintaining a mapping that identifies a specific location in the nonvolatile memory into which the data block is to be stored.
11. (CURRENTLY AMENDED) The computer-readable medium as recited in Claim 7, wherein:

the step of the software application determining a location in the nonvolatile memory includes the software application determining a plurality of locations in the nonvolatile memory for storing the data block;

the step of the software application inserting an address value in the data block includes the software application inserting a plurality of address values in the data block, wherein the plurality of address values identify multiple locations in the nonvolatile memory into which the data block is to be stored; and

the step of storing the data block to the nonvolatile memory includes storing the data block into each of the multiple locations in the nonvolatile memory only after the module other than the software application verifying that the plurality of address values includes an address value that correctly identifies the location in the nonvolatile memory into which the data block is to be stored.

12. (CURRENTLY AMENDED) The computer-readable medium as recited in Claim 7, wherein:

the step of the module other than the software application verifying that the address value contained within the data block correctly identifies the location in the nonvolatile memory into which the operation is going to store the data block is performed by a storage device, and

the step of performing the operation to store the data block to the nonvolatile memory only if the address value contained within the data block correctly identifies the desired location in the nonvolatile memory into which the operation is going to store the data block is performed by the storage device.
13. (CURRENTLY AMENDED) An apparatus for storing data in a nonvolatile memory, the apparatus comprising a memory storing instructions which, when processed by one or more processors, cause the performance of the steps of:

a software application determining a desired location in the nonvolatile memory for storing a data block;

the software application inserting an address value in the data block, wherein the address value identifies the desired location;

prior to performing an operation that stores the data block to the nonvolatile memory, a module other than the software application verifying that the address value contained within the data block correctly identifies the location in the nonvolatile memory into which the operation is going to store the data block; and performing the operation to store the data block to the nonvolatile memory only if the address value contained within the data block correctly identifies the desired location in the nonvolatile memory into which the operation is going to store the data block.

14. (ORIGINAL) The apparatus as recited in Claim 13, wherein the memory further stores one or more additional instructions which, when executed by the one or more processors, cause the performance of the additional step of after storing the data block to the nonvolatile memory,
reading the data block from a location in the nonvolatile memory; and
determining, based upon the address value contained within the data block, whether the data block was read from the desired location in the nonvolatile memory.
15. (ORIGINAL) The apparatus as recited in Claim 14, wherein the step of determining, based upon the address value contained within the data block, whether the data block was read from the desired location in the nonvolatile memory includes comparing at least a portion of the address value contained within the data block with data that indicates the location in the nonvolatile memory from which the data block was read.
16. (ORIGINAL) The apparatus as recited in Claim 13, wherein the memory further stores one or more additional instructions which, when executed by the one or more processors, cause the performance of the additional step of maintaining a mapping that identifies a specific location in the nonvolatile memory into which the data block is to be stored.
17. (ORIGINAL) The apparatus as recited in Claim 13, wherein:
the step of determining a location in the nonvolatile memory includes determining a plurality of locations in the nonvolatile memory for storing the data block;
the step of inserting an address value in the data block includes inserting a plurality of address values in the data block, wherein the plurality of address values identify

multiple locations in the nonvolatile memory into which the data block is to be stored; and

the step of storing the data block to the nonvolatile memory includes storing the data block into each of the multiple locations in the nonvolatile memory only after verifying that the plurality of address values includes an address value that correctly identifies the location in the nonvolatile memory into which the data block is to be stored.

18. (CURRENTLY AMENDED) The apparatus as recited in Claim 13, wherein:

the step of the module other than the software application verifying that the address value contained within the data block correctly identifies the location in the nonvolatile memory into which the operation is going to store the data block is performed by a storage device, and

the step of performing the operation to store the data block to the nonvolatile memory only if the address value contained within the data block correctly identifies the desired location in the nonvolatile memory into which the operation is going to store the data block is performed by the storage device.